The Farmers Helper

Kid targeted text adventure game

Farm centric

Math based questions

Must include:

Ask user to input name

Name of character

Actions to take – places to go

Numbers of things

Uses accii characters

Use code justifications

One py file with main()

Outs use only sys.stdout.write

snake\_case

one or more arithmetic or logical operators applied to numerical variables

list-type data structure. Only list-type for data structures, no tuples or dictionaries

while-loops used exclusively for when reptition required

if-statements with elife and else clauses use on inputs

compound conditions with either “or” or “and” or both

The Story and Pseudo code

Hi there! Welcome to “The Farmers Helper”.

Enter your first name to get started

[Input name]

The Farmers Helper is text based adventure game with a focus on solving Math problems in a fun and interactive way to help the farmer’s helper get all their chores done.

BREAK

This summer holidays your parents have sent you to stay with your Uncle and Aunty on their farm outside Cowaraump, about 4 hours South of Perth. You arrived late in the evening with your parents, whom dropped you off before continuing their journey further south-east to Albany for a little holiday. You’ve spent many summers on the farm swimming in the dam, learning to ride horses, climbing trees and going on hikes.

BREAK

During dinner with your Uncle and Aunty shortly after you arrive, your Uncle mentions that he and your Aunty will be taking a drive to Dunsborough (the local town) for some early morning shopping the next day and wonders if you can take care of a few odd jobs for him while they are gone

Uncle:“We won’t be back until just before lunch-time and I wouldn’t usually ask but the animals can get pretty cranky if they aren’t fed on-time. I’m happy to pay you for the mornings work.. say $50.. and any other mornings you can help out. I’d really appreciate it.”.

[input]

Yes = continue exposition

No = “are you sure? $50 for a mornings work is pretty fair.. think of all the computer games I’ll be able to buy when I get back home.. plus it doesn’t sound too hard..I’d better say yes”

[loop back around, only continue if answer is yes]

Uncle: “Great! I’ll leave you a note with some instructions in the morning, it shouldn’t take you too long and we will be back from town in time to have a swim in the dam after you’re finished”.

Aunty: “I’ve got some fresh baked savoury muffins I’ll leave out for your breakfast too!”

Uncle: “And they sure are delicious! Well we all better get an early night, we have a big morning tomorrow.”

BREAK

\*You head up to bed and go to sleep for the evening\*

\*The rooster crows and you awaken, wiping the sleep from your eyes\*

\*I better go see about that list of jobs Uncle left for me, I’d love to be finished in time to have a swim in the Dam! Plus he did say he’d pay me\*

You head downstairs and collect the note from the kitchen table

“[input\_name],

Below is the list of jobs I needed you to take care of while your Aunty and I are in town;

-Feed the Chickens and collect any eggs they may have laid.

-Feed the Horses and let them out into the paddock.

-Water and fertilise the vegetables in the vegetable garden.

Please make sure you don’t overfeed the animals, the amounts they each need will be written on their feed bags! The same goes for the vegetables, Aunty is very precious about them.

We will see you later-on today,

Love, Uncle.

PS. The neighbours dog tends to join me when I start my day, he’s always a great help.”

“That doesn’t seem too hard” you think to yourself. “But I best get started”.

BREAK

You head out the front door to get started on your list of jobs. You’re greeted by an excited bark and the wagging of a bushy red tail, \*It must be the neighbours dog\*. You bend down to give him a Pat and read the name tag on his collar.

[input]

What is the dogs name? [type the dogs name below]

Dog\_name:

“Hi there dog\_name, you’re a good boy aren’t you”

Dog\_name barks excitedly and follows you out onto the verandah.

“where should we start first on this list dog\_name?

[input]

Choose from the list of locations to start your list of jobs;

Chicken coop

Horse stable

Vegetable Garden

[type the entry you would like to start with. For example type: “chicken coop” to go to the

Chicken coop.]

[Input read line above]

Read input above

Sys.stdout.write (readline” “The [input] seems like a great place to start with”)

BREAK

ALL LOCATIONS BELOW ARE IN AN ORDER DECIDED UPON BY THE USER.

**CHICKEN\_COOP**

You make your way to the chicken coop, passing near to the large Gum tree in the centre of the property.

Outside the chicken coop you see a large wooden chest with the words “Chicken Feed” painted on the front. Upon opening the chest you see a large bag of chicken feed with scoop next to it, a large empty bucket that it looks like the farmer puts the feed in, and a stack of cardboard egg holders (each of which can carry 6 eggs).

“You inspect the bag of chicken feed and notice the instructions on the back;

“Each chicken should be fed 50grams of Mr Sanders Chicken Feed each day to stay healthy and strong.” You look at the scoop and it reads 100 grams. \*that makes things a bit tricky\*

“You look into the Chicken Coop to count how many chickens are inside.”

“It looks like there are 25 chickens in the coop, how many scoops of feed will I need?”

[input]

(In numbers, type the number of scoops required to feed the chickens 50grams of feed each)

Correct answer is 12.5

If input > 12.5

“you’re close, but make sure you don’t overfeed the chickens”

If input < 12.5

“That doesn’t seem like enough to feed them all”

On correct answer;

“You fill the bucket with 12.5 scoops of chicken feed. That looks perfect! \*Dog\_name barks excitedly\*, seems like he knew the right amount all along. You spread the chicken feed over the grass in the coop for the chickens to eat.”

“While the chickens are busy eating you decide to collect the eggs they may have laid. On inspecting the coop you notice that only one of the chickens hasn’t laid an egg. How many egg holders will you need to carry all of the eggs that have been laid? (Remember, each egg holder can carry up to 6 eggs)

[Input]

Correct answer Is 4

If input > 4

“That seems like it will be too many”

If input < 4

“There are way more eggs than that”

On correct answer

“And not one space too many in the egg cartons! That seems a bit too perfect to be coincidence.”

“You take the egg cartons back to the house and leave them on the front porch. You shouldn’t carry them around all morning”. You check your list to decide where to go to next”.

Show\_job\_list

BREAK

**HORSE\_STABLE**

The Horse Stable is on the opposite side of the property to the Chicken Coop, next to a large stockpile of wood for the fire in the house. It’s a big wooden building, painted the traditional “Barn red” and you remember helping uncle paint it last summer. The backdoor of the Stable opens out into a large enclosed pasture for the horses to play in during the day.

\*He always seems to get me doing jobs for him over my summer break\* you think to yourself..

Dog\_name jumps excitedly as you open the stable doors and you find all the horses in their stalls, nickering loudly about their awaiting breakfast.

Dog\_name runs up to the bag of oats in the corner and sniffs excitedly at it. The front of the Oat bag reads “Farmers Fresh Oats – 10kg” and pinned to the mouth of one of the bags of oats you see a note written in your uncles handwriting;

“per horse;

2.5 Kilograms of Oats, 1/2 bail of hay”

You see the bundles of Hay uncle must be talking about stacked next to the oats and a large feeding trough in the middle of the stable. There are 6 horses in the stable.

How many bags of oats will you need to put into the feeding trough?

[input]

Correct answer is 1.5

If input <1.5

“close, but that doesn’t seem like enough”

If input >1.5

“that’s a lot of oats, that can’t be right”

Correct answer

“Dog\_name wags his tail excitedly”, That’s the right amount isn’t it boy \*He seems to know these things\*.. lucky for him he doesn’t have to lift the bags.

How many bundles of hay should be put in the trough?

[input]

Correct answer is 3

If input > 3

“that is surely way too much”

If input < 3

“they are big horses.. surely they need to eat more than that”

On correct answer

“three bales for 6 horses seems right to me \*dog\_name\* barks excitedly in agreement, his bushy tail sweeps at the hay on the floor as it wags.”

“Once the food is in the trough, you open the back doors to the stables for the horses to roam in the pasture for the day, then you let the horses out of their stalls to have their breakfast. Dog\_name runs around your legs excitedly as you close the front stable doors behind you as you leave the stable.

“Whats next on the list dog\_name?”

Show\_job\_list

Looks like it’s just \_insert\_job\_

BREAK

**VEGETABLE\_GARDEN**

The vegetable garden is just next to the house, 4 plots of raised garden beds are arranged in a small grid with lettuce’s, herbs, tomatoes and potatoes all growing in their own garden beds. The garden itself is surrounded by a high fence to keep out the Rabbits and Kangaroos with a small open shed in the corner.

Dog\_name leads you over to the shed, he seems to know what we are here to do!

The is filled to the brim with gardening tools, bags of fertilisers and a watering can. There is a note taped above the watering can, it looks like its been there for a while..

“Uncle, make sure you read the fertiliser instructions! Its only one watering cans worth of water per garden bed or else you’ll over water and kill my veggies again!

\*in another style of handwriting is written just the words\* “sorry love”.

You grab the bucket of fertiliser and roll it over to read the back “McClure’s fertiliser helps your plants grow big and strong. Simply follow the recommended dilutions for each type of plant and watch them blossom!”. On the list of recommended dilutions, you spot the ones you will need;

25ml per 500ml for Lettuce’s

45ml per 500ml for Mixed Herbs

90ml per 500ml for Tomatoes

75ml per 500ml for Potatoes

Lettuces

You grab the watering can, noting its 4.5L marking at the top and look to dog\_name. “Which Garden bed should we water and fertilise first then dog\_name? \*dog\_name looks up at you expectantly, seemingly wanting you to decide..\*

Which garden bed do you want to start with?

Liter

Litre

Lettuce

Mixed herbs

Tomatoes

Potatoes

LETTUCE

[input] In liters, how much of the McClures liquid fertiliser do you need to add to the watering can for the lettuce?

Correct answer 0.225L

“Perfect! Im a real green thumb”.

If input /= to 0.225L

“I’ll kill these lettuce’s if I do that much, better try again”

MIXED HERBS In liters, how much of the McClures liquid fertiliser do you need to add to the watering can for the Mixed Herbs?

Correct answer 0.405L

“dog\_name barks excitedly!\* “can a dog be a called a green paw?

If input /= to 0.405L

“that doesn’t look right to me, wouldn’t want aunty leaving me a note too”

TOMATOES

How many milliliters of fertiliser do I need for these tomatoes?

Correct answer 810

“they are going to be so big and juicy when they are ripe!”

If input < 810ml

“I don’t want them not growing big enough, better double check that”

If input > 810ml

“that seems like it will be too much”

POTATOES

In liters, How much fertiliser will you need for these potatoes?

Correct answer 0.675l

“Maybe this is the secret to Aunty’s roast potatoes.. get them nice and big”

If answer /= 0.675

“dog\_name barks at you before you can add that to the watering can and shakes his head at at you\*.. “hmm, maybe that’s the wrong amount”

You finish watering all the garden beds and put the watering can away. Dog\_name eyes the scarecrow menancingly “time to go is it fella? Shall we see what’s next on the list”

Show \_job\_list

BREAK

It looks like we’ve finished everything! Dog\_name looks up at you triumphantly and rolls onto his belly, you’ve no choice in this situation [rub his belly, rub his belly, rub his belly]

“want to come for a swim in the dam with me when Uncle and Aunty get back dog\_name?”

“dog\_name rolls back over onto his legs and spins around excitedly\* “that looks like a yes to me!

Dog\_name perks up, looking towards the drive-way to the farmhouse, you hear it too now. Your Uncle and Aunty have returned from their shopping trip to town. You head back to the house to let them know you’ve finished your list of jobs and give them a hand with their shopping, Dog\_name bounds up to your Uncle and Aunty as soon as they are out of the car, spinning circles around them and barking excitedly in your direction.   
“Dog\_name help you out this morning did he? He does that for me too. Uncle hands you a large beef bone from the butchers and a crisp $50 note for completing your jobs. “I got dog-name this, I knew he’d give you some help”.

Shall we head to the dam for a swim now \_player\_name?

BREAK

This is going to be a good summer you think to yourself while sitting on the bank of the dam, dog\_names new bone hanging from his mouth as you give him a scratch around the ears. “Tomorrow I can teach you how to fish in this dam if you’d like \_player\_name?” your uncle calls to you from waist deep water.

“yup, definitely a good summer..”

Dog\_name barks excitedly

End

Thanks for playing the farmers helper.

[type end to exit the game]